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Design and Development of LPU-B High School Website

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Abstract - *This study was conducted to develop and assess the LPU-B High School website as perceived by the faculty members and selected staff and students in terms of content, efficiency, functionality and usability. It also sought to test the significant difference in the assessment of the two groups of respondents; and to propose measures to enhance the website. The applications were built in the web. It comprises of three aspects: a database component, the use of a programming/scripting language, the design and implementation of the graphical user interface (GUI). The user interface was written primarily in Hypertext Mark-up Language (HTML) and Cascading Style Sheet (CSS) and is accessible via any web browser. The processing application handles request/tasks performed by the user on the server side using PHP content management system technology. The server then returns the appropriate information from the database. The data storage is in the form of relational databases using MySQL that stores data needed by the application in its tables. All components of the application, which include the user interface, processing scripts and database reside on the server. The website Uniform resource locator (URL) is hs.lpubatangas.edu.ph.*

INTRODUCTION

Today, websites are the best way to publicize and disseminate information to the utmost number of individual in the world. The Internet is a technology for organizations providing means to communicate with the public. It also has the only one characteristic without geographical boundary or time limit, everyone interacts through one-to-many or many-to-many networks meeting matches to do business and provide or request services they want [1].

Web browsers such as Firefox and Internet Explorer are the means to deliver the information on a webpage, the basic foundation of a website which has the basic structure (architecture) written in web Program. Nowadays information age, the majorities of organizations have a website with their policy and their artefact and service information. It is perhaps the mainly economic and the most suitable way to disseminate information and data all over the world. Due to advancing strides and rapid changes, computer trends had surfaced. It becomes a vital fixture in school in which the mental capabilities of students are being tested and their creative skills are developed using their modern technology which include the creation of web application.

Over the years, the term "web design and development" has become a catchall for a process that encompasses a number of different disciplines, from user experience design, to document mark up, to serious programming. There is a major difference between "web design" and just designing a nice website and web development. A website essentially has two sides to it. The design side that creates the look and feel of the site based on what you, the site owner, would like to communicate to your clients. The other side is based on functionality and what it is that you want your site to do. The first thing in this process is website design. Designing of a website plays an important role. Well-designed website can attract huge visitors and helps you to beat your competitors. Web design is the skill of creating presentations of content (usually hypertext or hypermedia) that is delivered to an end-user through the World Wide Web, by way of a Web browser or other Web-enabled software like internet television clients, microblogging clients and RSS readers.

On the other hand, web development is developing the business identity on the web. It is creating a synergetic effect between both facets of your business - online and offline. It's using the

successful combination of graphic design, copywriting, programming, usability, human computer interaction, and online marketing skills to develop and execute a successful project on the web. A successful web development company will find the balance and make it all work.

To ensure that the developed website has been in line with the requirements of the users, valuable inputs were gathered from the respondents through in-depth interviews which were analyzed after the initial website development. These respondents were also asked to use the system and to provide feedbacks after using it. The results as well as the observations from their first use of the prototype were used by the researcher to implement further enhancements of the website. With all the aspirations and hopes, the researcher decided to design the LPUB High School website that could help the university to advertise its curricular offerings and services beyond the borders of the Asia Pacific region.

OBJECTIVES OF THE STUDY

This study aimed to design and develop the LPU-B High School website. Specifically, the study was guided by the following objectives: to design and develop a website for LPU-B High School; to assess the LPU-B High School Website as perceived by the faculty members, selected staff and students in terms of content, efficiency, functionality and usability; to test the significant difference in the assessment of the two groups of respondents in terms of content, efficiency, functionality and usability; and to propose measures that will enhance the website.

REVIEW OF LITERATURE

The Web has brought many unique benefits to marketing including low costs in distributing information and media to a global audience [2]. The internet is a collection of various services and resources. It connects millions of computers together globally, forming a network in which any computer can communicate with any other computer as long as they are both connected to the Internet [3]. Research focuses to concentrate on many distributed object-component technologies and web frameworks for web-based applications especially in e-commerce, e-business and the other similar areas within web-based enterprises [1], [4].

Web services are applications provided by service servers. The use of Web services implies the use of simple protocols that are easy to implement in comparison with other methods [5]. The database driven application with PHP programming language and MySQL database management are appropriate tools for developing web-based teaching support system. The web-based teaching support system successfully implemented features of security, user friendliness, inter-operability, reliability and scalability as evaluated by faculty members and students [6]. Web operation goal is to improve the satisfaction of site visitors to make the user trust and identity website, they can obtain information on a web site [7].

During recent years navigation using web pages have gained a considerable importance not only among the academia but also amongst students, parents, industry and businesses, but the pioneers of the web were researchers and university teachers [3].

Today, Web is not only an information resource but also it is becoming an automated tool in various applications. Due to the increasing popularity of Web, one can be very cautious in designing the Website. Poor and careless web design leads to hard ship to public utility and does not serve the purpose [8].

Semantic Web creates an artificial intelligence (AI) application which will make web content meaningful to computers, thereby unleashing a revolution of new abilities and it intends to support machine-processing capabilities that will automate web applications and services [9].

Bhatia and Singh [10] found that one of the foremost causes of using design patterns is essentially parallel to those for using any object oriented techniques. Design patterns prop up reuse, without constraining implementations to a specific platform or language, and promote efficient use of design time.

Alexander [11] found that if universities want to successfully market their courses online, their websites must be designed to meet the needs of prospective students

The project study of Robles [12] aimed to create an online learning facility for Saint Bridget College. The design of the asynchronous environment was used as tool to create interactive content for use in their courses. The proponent used web programming tools such as PHP general scripting language and Macromedia Dreamweaver.

Casuga [13] covered the development of web-based clearance system which is deemed to improve

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the process of securing clearance particularly in the redundant procedural functions of submitting semestral requirements, queuing at each office at every end of the semester and inquiries of the submitted and not yet submitted requirements.

The study conducted by Raquedan [14] where several schools and universities with best IT programs as determined by the Philippine Commission of Higher Education were reviewed using Heuristic evaluation method with the guidelines based on the latest edition of the research based web design and usability guidelines.

Design and Development of LPU-B High School Website is somehow related to the study conducted by Baesa [15] which aimed to develop and evaluate a web portal for the Department of Education Division of Batangas. This web portal facilitated the dissemination of information to improve the process of interaction among Division office and the field offices.

Johnson [16] and Visser and Weideman [17] agreed that too much text is 'bad writing' and is something that frequently occurs on websites. Nielsen and Loranger [18] interpreted content from a slightly different perspective and estimate that visitors often view a webpage for 45–60 seconds. The same authors estimate that a visitor could read a maximum of 200 words during that time period. This indicates that the amount of text placed on a webpage is only important and considered from a visitor's perspective and not from a search engine's perspective.

The content on university websites often fails to deliver necessary information. The main reason for this is that the content does not appear to be written for its target audience [3]. The issue at the heart of web accessibility is that many sites are not designed with equal access in mind. In other words, lack of web accessibility is more a result of faulty design rather inadequate technologies [19].

Brown et al., [20] suggested that to achieve the accessibility, web site need to be equitable use, flexibility, simple and intuitive use, perceptible information, sensory abilities, tolerance for error and low physical effort. The current web architecture often faces performance and reliability problems. Scalability, latency, bandwidth, and disconnected operations are some of the important issues that should be considered when attempting to adjust for the growth in Web usage [2].

In terms of functionality, one of the most important characteristics of a software application is its ability to share data, information and processing services [21]. Despite the growing comfort and familiarity with the Web both as a medium to which to publish to as well as a conduit for and as a tool for the management of information maintained in other environments, there is still a tendency to confuse one function with the other [22].

In order to achieve high performance as well as interoperability, it is proposed that using hybrid architecture of Web Services (as non-proprietary and platform-independent technologies) and an efficient and high performance distributed component technology (as proprietary and platform-dependent technology) can solve the mentioned issue [21].

Once a software product has been purchased for use within an office or home environment, the product must sustain its usefulness, over and above its actual purpose, by means of usability [17].

Johnson [16] associates the development of civilized societies with website usability (WU) and usefulness. Websites are often still not developed with WU or usefulness in mind as a primary objective [16], [18]. Web usability attributes focus primarily on what makes the website visitor respond [23].

METHODS
Research Design
The goals of this project included: designing and developing LPU-B High School Website. Both applications were built as web applications. It comprises of three aspects: a database component, the use of a programming/scripting language, the design and implementation of the graphical user interface (GUI). These components tie together to form the complete web applications. The two applications involved were designed and developed sequentially. The user interface was written primarily in Hypertext Mark-up Language (HTML) and Cascading Style Sheet (CSS) and is accessible via any web browser. The processing application handles request/tasks performed by the user on the server side using PHP content management system technology such as WordPress. The server then returns the appropriate information from the database. The data storage is in the form of relational databases using MySQL that stores data needed by the application in its tables. All components of the application, which include the user interface, processing scripts and database reside on

the server. The website Uniform resource locator (URL) is hs.lpubatangas.edu.ph.

The proponent used the descriptive design to determine the significance of LPUB High School website and portal to the students and faculties. Descriptive design according to Javier (2012) involves describing, recording, analyzing and interpreting conditions that presently exist. The purpose is to find new truth. The truth may vary in forms such as increased quantity of knowledge, a new generalization, an increased insight into some factors which may explain a situation, discovery of a new casual relationship, or formulation of the problem to be solved in more accurate and specific manner.

Furthermore, the proponent implemented the so-called 'Software Development Life Cycle' where various software development approaches defined and designed which are used/employed during development process of software. It includes analysis, which involves initial assessment and feasibility study. The design is where the user requirements, existing system evaluation and logical system design takes place. The development process is where the detailed system specification was used. The testing phase where coding, testing, debugging and installation processed. And lastly is the finalization, where evaluation, maintenance and enhancement implemented.

Participants

The respondents of the study were the 100 High School students, 10 HS faculty members together with the HS secretary and five (5) selected administrative personnel with a total of 115 individuals were selected as respondents of the study. The study has only two groups to compare their perceptions: the HS students and the administrative personnel who are composed of the HS Faculty members, HS Principal, MIS Director, Director of Promotion and Publication and AVPAR.

Instrument

The research instrument that was utilized to adequately answer the questions in the beginning of this study is the questionnaire. It provides an approach to use the ISO 9126 metrics to measure the software quality during the software life cycle [24]. The outline of the questionnaire for this research is adapted from the three of ISO 9126 criteria of LPU Batangas, which was aimed to assess the perceptions of the respondents regarding the content, functionality and accessibility of the LPU-B High School website and portal to the students and faculties. The process of developing the questionnaire also involved consultation to the Research Director of LPU-B Batangas. Taking into account all the comments and suggestions of the researcher's adviser, a modified questionnaire was produced.

Procedure

The study was designed to be browser and platform compatible. First, the implementation of PHP content management system (CMS) was used to manage the content of the website. CMS is composed of two elements: the content management application (CMA) and the content delivery application (CDA).The CMA element permits the content manager or author, who does not know Hypertext Mark-up Language (HTML), to cope with the creation, revision, and elimination of content from a Web site without needing the knowledge of a Webmaster while the CDA element uses and compiles that information to update the Web site. This project was designed to make it easy for non-technical users to add, edit and manage a website. The website template was created using the Cascading Style Sheet (CSS) and Artisteer program then incorporated into WordPress. All the images were edited using the Adobe Photoshop image editor. The homepage slider uses the so-called "easy photo album" plug-in to make a slideshow of the image. The albums are responsive and display in a light box. It is composed of six menus: the Home, About, Admission, Gallery, Portal and Contact Us. All are created using HTML.

On the other hand, the backend side was created using a single account, the super administrator role who is somebody with access to the site entire network administration and all other features. There are five roles that can be assigned for faculty and staff: the subscriber, author, contributor, editor and the administrator. Each user role is capable of everything that a less powerful role is capable of. An administrator role has full power over the site and can do absolutely everything. Administrators can create more Administrators, invite new users, remove users, and change user roles. They have complete control over posts, pages, uploaded files, comments, settings, themes, imports, other users. An Editor can create, edit, publish, and delete any post or page (not just

their own), as well as moderate comments and manage categories, tags, and links.An Author can create, edit, publish, and delete only their own posts, as well as upload files and images. Authors do not have access to create, modify, or delete pages, nor can they modify posts by other users.A contributor can create and edit only their own posts, but cannot publish them. When one of their posts is ready to be published, it will need to be submitted to an Administrator for review first. Furthermore, once a contributor's post is approved and published by an Administrator, it can no longer be edited by the Contributor. Contributors do not have the ability to upload files or images, but they can see your site's stats. Subscriber do not have any editing privileges on your site whatsoever, they are simply people who have signed up to receive updates each time you publish a new post. The only thing they can do on your site is leave comments (if you have them enabled), though they do not have to be a subscriber to do so. For security reason, the subscriber role was disabled in this site.

The database were created using MySQL incorporated in the phpMyadmin and consists of twelve tables.The LPU-B High School website (http://hs.lpubatangas.edu.ph/) was uploaded to a hosting server that uses PHP version 5.2.17, MySQL version 5.5.33 as well as Apache version 2.2.26 and provided a dedicated IP Address. There is a login security solution feature to protect against hackers for denial of service attack (DDOS), SQL injection and brute force.

Secondly, the LPU-B High School website portal (http://hs.lpubatangas.edu.ph/portal) was specifically designed similar to the social network community. The portal used social engine framework and PHP to build custom social network website. The webpage has four sections: the login/logout page, registration, users' timeline and the control panel. The Red Grid theme of the portal was designed using Cascading Style Sheet (CSS). The login page is use to access the member community using the designated credential account. The registration page is where the users create their accounts while the user's timeline is where the users upload photos, link, videos, and music. They can invite or add members, create polls, events, groups and view profile. The control panel is where the admin access the backend portion. The admin can view the portals' statistics such as page views, members, sign-ins, messages, friendships,

comments, abuse reports, announcements, email sent and online members. The database were created using MySQL incorporated in the phpMyadmin and consists of one hundred thirty one tables. Both LPU-B High School website and student portal are subdomains of LPU Batangas website.

In assessing the website, the researcher asked permission from the High School Principal and Assistant Vice President for Academics and Research (VPAR) to administer the survey questionnaire to determine the perceptions of the HS Faculty Members, HS students and some selected administrative personnel regarding the content, functionality and accessibility of the website. The researcher personally administered the questionnaire to the High School Students. Explanation on how the website can be accessed and how to use the student portal were done before giving them the questionnaire.

Data Analysis
The data gathered from the survey questionnaire were classified, tallied and encoded to determine the perception of the respondents in the developed website. Weighted mean and rank were used to analyze the respondents' level of assessment in the website while T-test was used to determine the difference of the assessments between students and administrative personnel.

The given scale was used to analyze and interpret the result of the gathered data: 4.50 – 5.00: Strongly Agree (SA)/ Very High (VH); 3.50 – 4.49: Agree (A)/ High (H); 2.50 – 3.49: Moderately Agree (MA)/ Average (A); 1.50 – 2.49: Disagree (D)/ Low (L); 1.00 – 1.49: Strongly Disagree (SD)/ Very Low (VL). Verbal interpretation was used to explain the result of the assessment made by the two groups of respondents while the holistic interpretation was used to interpret and generalize the result of the assessment.

RESULTS AND DISCUSSION
Figure 1 shows the design of the Homepage. The homepage is a website's initial chance to make an impression. This is a portal entry point to direct the visitors to other content. It is the most important page on most websites, and gets more page views than any other page. The LPUB High school homepage depicts the lifestyle of students inside the campus by means of slider images. It brags the quality of services offered through modern facilities to attract enrollees.
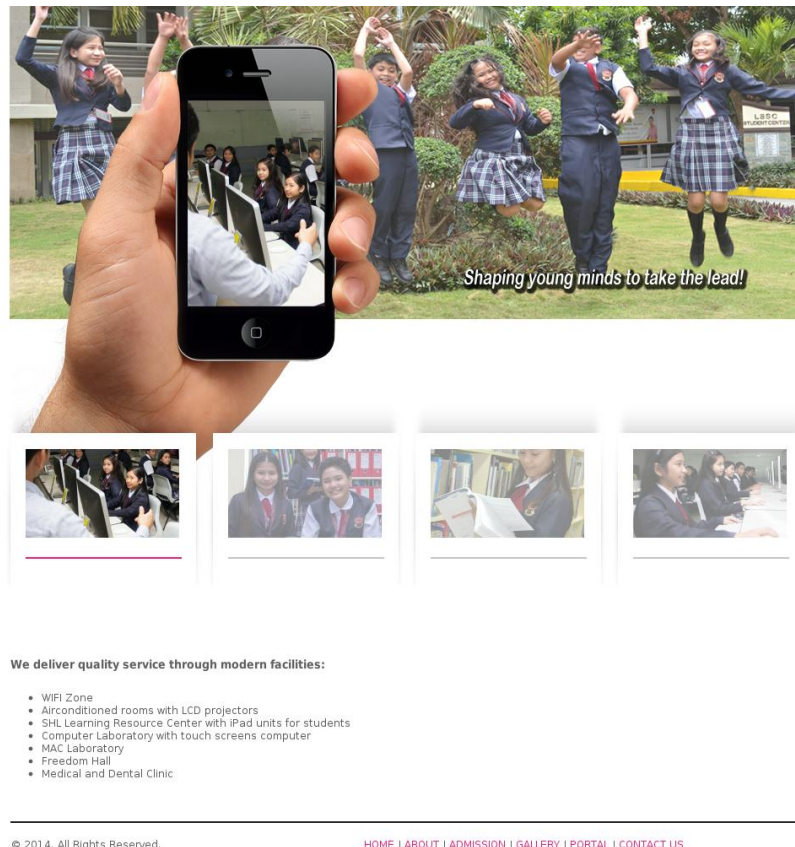
Figure 1. Design of 'Home' Page

'About' Page Content shows the primary purpose of the About Us page which is to provide information about the business and what it can deliver, so it include the basics, such as who the company serves, how long it's been around, and its long-term goals and mission. The LPUB High school About Page describe the vision and mission that will helps the university to be recognize not only here in the Batangas province but to the entire CALABARZON region. Its mission is committed to develop quality of education and develop leaders and lifelong learners who possess 4C's.

'Admission' Page Content shows part of the website where clients use to find the requirements or how they can be admitted. Normally, it gives detailed process or steps on how to enter the company premises and use the services of admission. LPUB High school Admission Page shows the enrollees what credentials they need to prepare and procedures in order to be admitted to the university. The procedures are applicable for the freshmen, transferees and foreign students. The information present on university websites is very important.

Prospective students use university websites to find what programs of studies are offered by a university. Current students may want to look up semester examination results online. Prospective faculty and staff may want to look up for jobs available at university [3].

Gallery Content Page shows a photo gallery on a website as collection of images or photos that are uploaded to the website and available for visitors to view. Its purpose is for people to see what's going inside the company like current events and activities. The LPUB High School Gallery Page shows the latest activities and events they are joining. The students' participation on different activities helps them to learn actively while enjoying.

Figure 2 shows the design of the 'Student Portal' page. This is an online gateway where students can log into a school website to access important program information. Using an online portal instead of printing information in booklets saves schools printing and paper costs, and benefits the environment by using fewer resources.
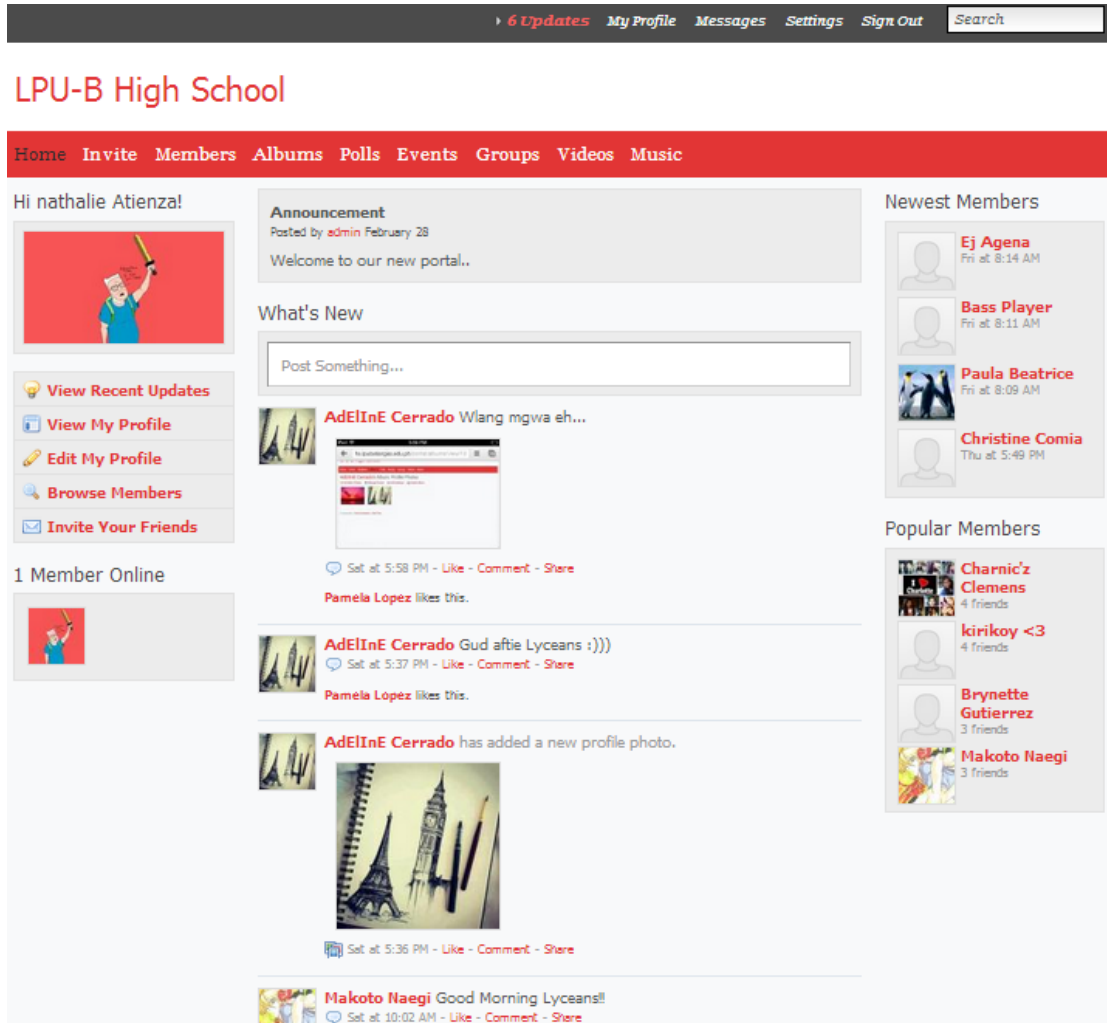
Figure 2. Design of 'Student Portal' Page

It also makes it easier for people to access important information from anywhere, at any time of day. LPUB High school portal is social network of students where they can socially connect to other students and faculties while learning. It directs students to educational resources for fun and learning.

'Contact Us' Page Content aims to get inquiries from website visitors. It is commonly used to get some feedback about existing products or services. LPUB High school Contact Us Page serves as an inquiry tool for client and enrollees.

Table 1 presents the assessment of the LPU-B High School Website as perceived by the Admin/Faculty and HS students in terms of content.

As shown in the table, student, admin and faculty strongly agree that the content of the website provides necessary details of the university and the content of

the website yields good reputation for the university with a weighted mean of 4.56 and 4.51 respectively.

Table 1. Assessment of the LPU-B High School Website in terms of Content

Content	Student		Admin/Faculty		Total		
The content of the website...	WM	VI	WM	VI	WM	VI	Rank
1. is reliable and accurate	4.47	A	4.67	SA	4.50	SA	3.5
2. is substantial and informative.	4.44	A	4.60	SA	4.46	A	5
3. is relevant to the needs of the students	4.49	A	4.53	SA	4.50	SA	3.5
4. provides necessary details of the university	4.50	SA	4.93	SA	4.56	SA	1
5. yields good reputation for the university	4.45	A	4.93	SA	4.51	SA	2
Composite Mean	**4.47**	**A**	**4.73**	**SA**	**4.50**	**SA**	

The website shows the enrollees what credentials they need to prepare and procedures in order to be admitted to the university. This makes easier for people to access important information from anywhere, at any time of the day. Students can socially connect to other students and faculties while learning. It directs students to educational resources for fun and understanding. With this, LPUB High school site serves as an inquiry tool for client and enrollees.

The respondents find the content of the website is substantial and informative as the least with a weighted mean of 4.46 and verbally interpreted as agree.

The respondents strongly agreed that the content of the website provides necessary details of the university as denoted by the total weighted mean score of 4.56. The website also yields good reputations for the university with strongly agree verbal interpretation and 4.51 total weighted mean score on rank number 2. The website is also strongly agreed by the respondents as reliable and accurate with relevant content to the needs of the students with total weighted mean score of 4.50. However, the content of the website is substantial and informative obtained the least total weighted mean score of 4.46 with agree verbal interpretation. The computed composite mean score for admin/staff is 4.73 which is higher than the score of students with 4.47. The total composite mean score of 4.50 implies that in general, the website has obtained Very High assessment in terms of content.

Development of LPU High School Website is very timely to promote its existence as a medium for marketing and advertising. Its content is always necessary to reflect the good image of the university and it speaks of what the LPU can offer to its present and future clients. The developed website ensures the relevance of its content to the needs of the clients. Updating reliable information must always be made to maintain the integrity and accuracy of the content. This website is similar with the most basic site which is informational wherein it tells a potential customer or visitor what the business is all about. It also has the only one characteristic without geographical boundary or time limit, everyone interacts through one-to-many or many-to-many networks meeting matches to do business and provide or request services clients want [1].

The structure of many university websites mimics the structure of the organizations that own them. Information that is not contained within a prospective student's website--fees and scholarship information, is much harder to find. Sometimes this was because the information was not linked from course overview pages. Some students didn't know where to look and others simply gave up at this point, concluding that the university did not provide the information online. In other cases, the information was linked, but required the student to navigate through the hierarchy of a separate site and/or made through content that was generic and left them feeling unsure about whether it was relevant to their particular course [3].

Table 2. Assessment of the LPU-B High School Website in terms of Efficiency

Efficiency The user can easily	Student		Admin/Faculty		Total		
	WM	VI	WM	VI	WM	VI	Rank
1. move to any desired page.	4.47	A	4.73	SA	4.50	SA	2
2. manage necessary tasks through the use of student portal	4.39	A	4.60	SA	4.42	A	4.5
3. maintain groups and networks of friends through portal	4.68	SA	4.60	SA	4.67	SA	1
4. access the website without delays	4.37	A	4.73	SA	4.42	A	4.5
5. navigate and follow directions within the site	4.44	A	4.60	SA	4.46	A	3
Composite Mean	4.46	A	4.65	SA	4.49	A	

Table 2 presents the assessment of the LPU-B High School Website as perceived by the Admin/Faculty and HS students in terms of efficiency. The respondents strongly agreed that they can easily maintain groups and networks of friends through the use of portal as denoted by the total weighted mean score of 4.67 on rank number 1. They also strongly agreed that they can easily move within the website to any desired page as manifested by the total weighted mean score of 4.50. They agreed that they can easily navigate and follow directions within the site with 4.46 total weighted mean score. However, they agreed that they can easily manage necessary tasks through the use of student portal and can easily access the website without delays with the least computed total weighted mean score of 4.42.

The computed composite mean score for admin/staff is 4.65 which is higher than the score of students with 4.46. The total composite mean score of 4.49 implies that in general, the website has obtained High assessment in terms of efficiency.

The use of student portal in the LPU High School website is one of the features like other social networking sites where students can communicate through text and images. The website will limit the

members of the group only to all bona fide High School students of the LPU to avoid unnecessary discussion outside the boundaries of co-curricular activities.

One of the most important characteristics of a software application is its ability to share data, information and processing services [21]. Despite the growing comfort and familiarity with the Web both as a medium to which to publish to as well as a conduit for and as a tool for the management of information maintained in other environments, there is still a tendency to confuse one function with the other [22].

Table 3. Assessment of the LPU-B High School Website in terms of Functionality

Functionality The website has	Student WM	VI	Admin/Faculty WM	VI	Total WM	VI	Rank
1. an in-placed security features using password	4.45	A	4.93	SA	4.51	SA	2
2. functional buttons and links	4.43	A	4.93	SA	4.50	SA	3
3. several links which can easily direct the user to any desired page	4.29	A	4.93	SA	4.38	A	5
4. a feature of being user-friendly	4.57	SA	5.00	SA	4.63	SA	1
5. a well-designed, attractive and functional layout	4.37	A	4.67	SA	4.41	A	4
Composite Mean	4.42	A	4.89	SA	4.49	A	

Table 3 presents the assessment of the LPU-B High School Website as perceived by the Admin/Faculty and HS students in terms of functionality. The respondents strongly agreed that the website has a feature of being user-friendly as denoted by the total weighted mean score of 4.63. Likewise, the respondents in general strongly agreed that the website has an in-placed security features using password with functional buttons and links as indicated by the total weighted mean score of 4.51 and 4.50, respectively.

Meanwhile, they agreed that it has a well-designed, attractive and functional layout as manifested by the computed total weighted mean score of 4.41 on rank number 4. However, they still agreed that the website has a several links which can easily direct the user to any desired page as denoted by the least total weighted mean score of 4.38 on rank number 5.

The computed composite mean score for admin/staff is 4.89 which is higher than the score of students with 4.42. The total composite mean score of 4.49 implies that in general, the website has obtained High assessment in terms of functionality.

It is always an utmost consideration in designing and developing a website is the functionality. This website is deemed to be user-friendly through having a well-designed atmosphere of easiness and its acceptability to the users. Security is another factor that the researcher also considered to maintain the safety and confidence of the students and guarantee their protection against hackers.

Table 4. Assessment of the LPU-B High School Website in terms of Usability

Usability The user can easily...	Student WM	VI	Admin/Faculty WM	VI	Total WM	VI	Rank
1. adapt to the environment of the website	4.63	SA	4.71	SA	4.64	SA	1
2. learn the tools necessary for its operation	4.60	SA	4.71	SA	4.61	SA	2
3. understand the functions of each button	4.49	A	4.71	SA	4.52	SA	4
4. manage his account in the portal	4.44	A	4.79	SA	4.49	A	5
5. provide comments and upload pictures in the portal	4.48	A	4.93	SA	4.54	SA	3
Composite Mean	4.52	SA	4.77	SA	4.55	SA	

Table 4 presents the assessment of the LPU-B High School Website as perceived by the Admin/Faculty and HS students in terms of usability. The respondents strongly agreed that they can easily adapt to the environment of the website as denoted by the total weighted mean score of 4.64 on rank number 1. Likewise, they can easily learn the tools necessary for the website's operation and they can easily provide comments and can upload pictures in the portal with 4.61 and 4.54 total weighted mean scores, respectively. However, they agreed that they can easily manage their account in the portal as denoted by the least total weighted mean score of 4.49.

The computed composite mean score for admin/staff is 4.77 which is higher than the score of students with 4.52. The total composite mean score of 4.55 implies that in general, the website has obtained Very High assessment in terms of usability.

The familiarization of the users to the presently developed website is not anymore a major concern since majority of the respondents have already their accounts in different social networking sites. They already learned different operations for various computer applications and features.

Web usability is of major importance to attract and retain visitors [25],[17]. Nielsen [27] agrees with this author, stating that website usability is crucial for survival. One reason for this phenomenon is stated as being that if a visitor's needs are not satisfied on a particular website the visitor will simply leave and visit a website that will do so [26].

Table 5. Difference in the Assessment in Terms of Content, Efficiency, Functionality and Usability

	Student	Admin/Faculty	Total	t-value	p-value	remarks	Decision
Content	4.47	4.73	4.50	-3.076	.003*	Significant	Reject
Efficiency	4.46	4.65	4.49	-1.496	.148	Not Significant	Accept
Functionality	4.42	4.89	4.49	-5.974	.000*	Significant	Reject
Usability	4.52	4.77	4.55	-2.037	.054	Not Significant	Accept
Average	4.47	4.76	4.51				

*p-value < 0.05

Table 5 reveals the difference in the assessment of the two groups of respondents in terms of content, efficiency, functionality and usability. As shown in the table, the website obtained the highest assessment in terms of usability with 4.55 computed composite mean score followed by content while efficiency and functionality with the least composite means.

There is a significant difference in the assessment between students and admin/staff in terms of content and functionality as denoted by the computed p-values of .003 and .000 which are less than the 0.05 level of significance, therefore, the null hypothesis is rejected on these variables. This signifies that the assessment of the admin/faculty is significantly higher than the assessment made by the HS students in terms of content and functionality.

However, there is no significant difference in the assessment of the two groups in terms of efficiency and usability as indicated by the computed p-values of .148 and .054, respectively which are greater than the 0.05 level of significance, therefore, the null hypothesis is accepted on these variables. This signifies that the mean variation on the assessment of both groups is not sufficient to yield differences. Respondents assessed the website with high and very high levels. Alexander [11] found that if universities want to successfully market their courses online, their websites must be designed to meet the needs of prospective students.

Proposed Enhancement

The enhancements to be made in the website were based on each statement with the least weighted mean score from the four areas of assessment. These areas include: adding more substantial and informative content; accessing faster website; providing more buttons and links; and managing easily the portal.

CONCLUSION AND RECOMMENDATION

The LPU High School website was beneficially designed and developed for its intended clients using PHP, Cascading Style Sheet (CSS), Artisteer program and MySQL. The website obtained a very high assessment rating in terms of content and usability while high assessment rating was achieved in terms of efficiency and functionality. Admin/Staff have significantly higher assessment towards the LPU High School Website compared to High School Students in terms of content and functionality. The proposed enhancement was focused on adding more substantial and informative content; accessing faster website; providing more buttons and links; and managing easily the student portal.

It is recommended that the LPU High School website may be maintained by an administrator from the MIS department and updated regularly and the content may be updated regularly with the latest news and announcement regarding academic, cultural and sports events. In order to achieve the maximum efficiency of the website, the webmaster may opt to utilize images with appropriate file size and refrain from using too many flash files. Teachers may encourage the students to utilize the portal for educational purpose and intellectual discussion of school activities. Folders may be used in photo gallery to organize the pictures.

The proposed enhancement may be implemented to improve the way that the administration disseminates information and services to its clients. Future researchers may conduct similar study using additional set of assessment criteria and may enhance some of the features of the present website.

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